



## QSD2304L DVR User's Manual



The guide is for the H.264-100 FPS /120 FPS 4-channel digital video recorder.

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# CHAPTER 1 Introduction

## 1.1 DVR Introduction

This DVR uses Dual Stream technology, with a main processor that can process the signal of DVR recording and an internet signal transmission simultaneously utilizing standard H.264 algorithm, the latest advanced video compression format. This technology allows the DVR to be completely controlled remotely over the internet, and allows good speed over the internet with high quality picture recording using a very low bit rate and allows many hours of recording on a smaller amount of hard drive space.

## 1.2 Main Features and Specification

### LIVE SURVEILLANCE

- Supports channel security by hiding live display
- Displays the local record status and basic information
- Two levels of password control: administrator and common user

### COMPRESSION FORMAT

Standard H.264.

### RECORD MEDIA

The DVR supports one IDE HDD

### BACKUP

- Supports backup via USB to USB flash memory

- Supports remote backup through network client software

## **RECORD & PLAYBACK**

- Record modes: Manual, Sensor detection, Schedule and Motion detection
- Supports HDD overwrite
- Supports single channel playback
- Supports deleting and locking the record
- Supports remote playback through Network Client software through LAN or internet
- Two record search modes: time search and event search

## **ALARM**

4 alarm inputs and 1 alarm output.

## **PTZ CONTROL**

- Supports various PTZ protocols
- Supports various PTZ presets
- Supports remote PTZ control

## **COMMUNICATION PORT**

RS 485 communication port.

## **NETWORK**

- Supports TCP/IP protocol
- Supports remote DVR configuration
- Supports static IP, dynamic IP (DHCP) and PPPoE
- On-time live surveillance, remote playback, remote backup
- Remote PTZ control and Preset
- Supports IE browser and Network Client software

## CHAPTER 2 Panel Layouts

Please make sure DVR is powered off before you connect other equipment to the DVR. Do not hot plug!

### 2.1 Check the Accessories

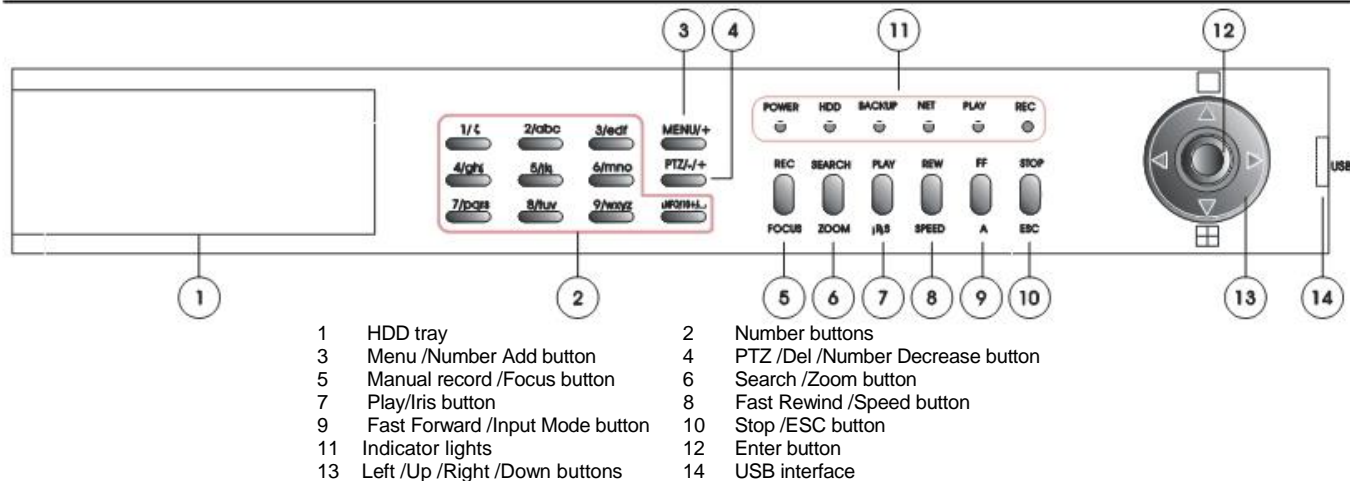
When you receive the unit, please check accessories and make sure you have all the parts.

Normally, accessories include: a mouse, a power cable, a CD-ROM with 'Network Client' software and some screws for installing the HDD.

You will need a screwdriver to secure the HDD into the DVR. The DVR uses one HDD.

### 2.2 Front Panel Layout

Figure 2.1 shows the functions of the buttons on the front of the DVR. The button layout on your model may be slightly different. If so, compare the layout of your model to the diagram below to determine the functions of the buttons.

**Fig2.1 Front Panel**

"A" button (#9) is used to switch the input mode.

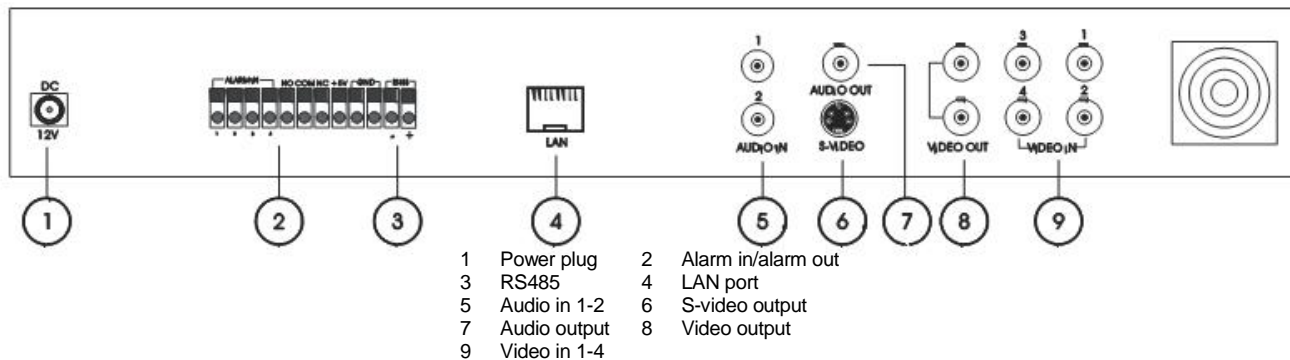
LED has six indicator lights. The function of the indicator lights are described below:

- The first light will be on when the DVR is powered on.
- The second light will flicker when HDD is written to or read.
- The third light will be on when you backup information in DVR.
- The fourth light will be on when a computer connects with the DVR via the network.
- The fifth light will be on when the DVR is playing back.
- The sixth light will be on when the DVR is recording.

## 2.3 Back Panel Layout

Figure 2.2 shows the connections on the back panel of the DVR. The layout on your model could be slightly different.

If so, compare the layout of your model to the below diagram to determine the interfaces.



**Fig2.2 Back Panel**

## 2.4 Remote Control Operation

### 2.4.1 Setting up the Remote Control

**Notice:** Please note that the Remote Control is not a standard part of this DVR. Your package might not include it.

Steps to prepare the Remote Control are described below:

**STEP1** Put the battery into the Remote Control.

1. Open the battery cover of the Remote Control.
2. Put in two AAA batteries and make sure that they are not inserted upside down.
3. Replace the battery cover.

**STEP2** Check the following if the Remote Control does not work.

- Are the battery's anode and cathode in the correct position?
- Do the batteries still have power?
- Is there a barrier between the Remote Control and DVR?

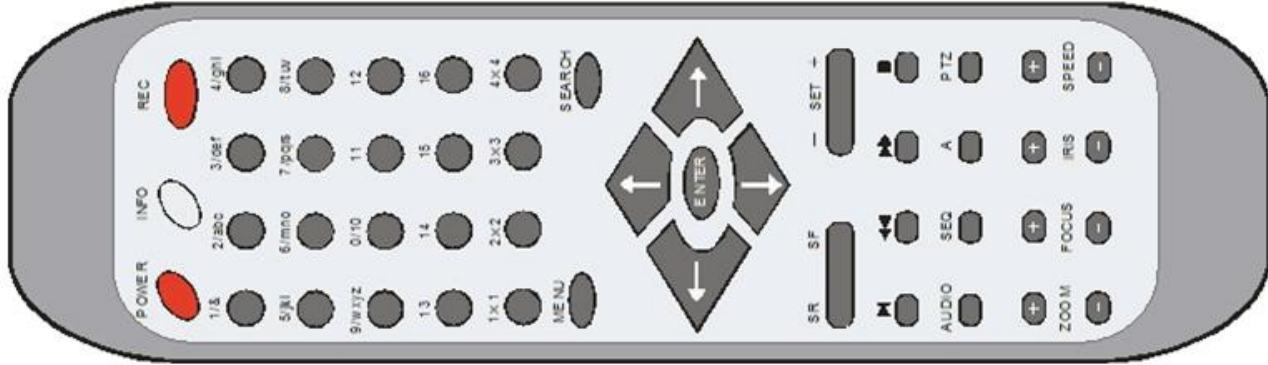
- Whether there are some signals which transmitted by other devices disturbing the Remote Controller or not.



**Notice:** If the possibilities above are excluded, please contact with vendor to change the Remote Controller.




### 2.4.2 Layout of the Remote Control















The layout of the Remote Control is shown in Fig2.3













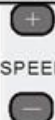
**Fig2.3 Remote Control**

The functions of the buttons on the Remote Control are described in the table below. You use the "A" button on the Remote Control to switch the input mode.

Button	Name	Description
	POWER	Power Button Press the button to shutdown the DVR.
	REC	Record Button If the DVR is not recording, press the button to start recording. If the DVR is recording, press the button to stop recording.
	INFO	Information Button Press the button to display the information of the DVR on the screen.

Button	Name	Description
	1-16	Number Buttons These number buttons are used for selecting channels and other functions.
	1X1	Full-screen display mode Press this button to display the picture of a single channel.
	2X2	Four-screen display mode Press this button to display the picture of four channels. Press "1X1" button in four-screen display mode to enter channel 1.
	3X3	Nine-screen display mode Press this button to display the picture of nine channels. Press "1X1" button in nine-screen display mode to enter channel 1.
	4X4	Sixteen-screen display mode Press this button to display the picture of sixteen channels. Press "1X1" button in sixteen-screen display mode to enter channel 1.
	MENU	Menu button Press this button to enter the main menu (refer to Fig3.2 Main Menu). Otherwise press the button to return to previous menu or exit the menu.
	SEARCH	Search button Press this button to enter the recording search page.
	Up	Up button Press this button to move the cursor upward.
	Left	Left button Press this button to move the cursor to the left.
	Right	Right button Press this button to move the cursor to the right.
	Down	Down button Press this button to move the cursor down.
	SR SF	Play single frame button Press left SR to go back by single frames. Press the right SF to go forward by single frames.
	-SET+	Switch channel button Press this button to switch the channel one by one. "-" is used to display next higher number channel, and "+" is used to display next lower number channel. You also can switch the channel by pressing number buttons.
	Play	Play and Pause button Press this button to play recording. Press the button once again to pause recording.

Button	Name	Description
	Fast reverse	Fast reverse button Press this button to fast reverse the record. There are three reverse speeds to choose: 2X, 4X, 8X.
	Fast forward	Fast forward button Press this button to fast forward the record. There are three forward speeds to choose: 2X, 4X, 8X.
	Stop	Stop button: Press this button to stop playing record.
	Audio switch	Audio switch button Press this button to switch the channel playing audio.
	SEQ	Sequence Button Press this button to display the DVR channels in turn.
	A	A Button Press this button to switch the mode of font entry.
	PTZ	PTZ button Press this button to enter PTZ camera mode.
	Zoom+/-	Zoom button Control the zoom-in and zoom out function on Speed Dome (PTZ) cameras.
	FOCUS+/-	FOCUS button Control the focus of Fast Speed Dome (PTZ) camera.
	IRIS+/-	Aperture button Control the lens light input of Fast Speed Dome (PTZ) cameras.

Button	Name	Description
	SPEED+/-	SPEED- button Control the rotational speed of Fast Speed Dome (PTZ) cameras.

The following table shows which letters which number buttons correspond to.

Number Button	Corresponding Letter	Number Button	Corresponding Letter
1	() . @ < >	2	ABC/abc
3	DEF/def	4	GHI/ghi
5	JKL/jkl	6	MNO/mno
7	PQRS/pqrs	8	TUV/tuv
9	WXYZ/wxyz		

## CHAPTER 3 Basic Operation Guide

### 3.1 How to Start the DVR



**Notice:** Before you power on the unit, please make sure the DVR is using the correct power supply and voltage. If the power indicator light is off, please do the following to start the DVR:

**STEP1** Connect DVR to AC adaptor and plug in.

**STEP2** Turn on the DVR.

**STEP3** Wait for DVR to initialize.

After the DVR is powered on, 'STARTING.....' appears on the screen, which indicates DVR is initializing.

When 'WELCOME' is displayed, you are in live display mode. You can then press the **"Menu"** button to enter the Main Menu.

The symbols which are displayed on the screen are explained in the following table:

Symbol	Meaning	Symbol	Meaning
LIVE	Live state	REC	Manual record
A	Sensor record	M	Motion record
DISK	% of HDD used	V-LOSS	Video loss

### 3.2 Main Menu Settings

To enter the Main Menu:

**STEP1** Press **"Menu"** button and input username and password (refer to Fig3.1 Login), you will see the Main Menu

(refer to Fig3.2 Main Menu).

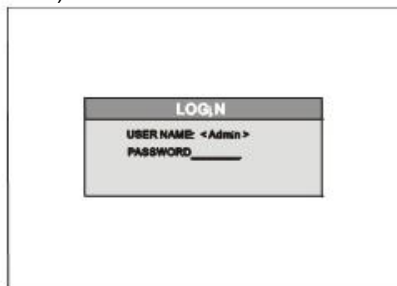


Fig3.1 Login



Fig3.2 Main Menu

**STEP2** Press "**Up**", "**Down**", "**Right**" and "**Left**" buttons to move cursor, selection is highlighted by yellow.

**STEP3** Press "**Enter**" key to enter the sub-menu. And press "**Menu**" key to get back to Main Menu when using the front panel to operate.

The structure of the main menu is shown in Fig3.3.

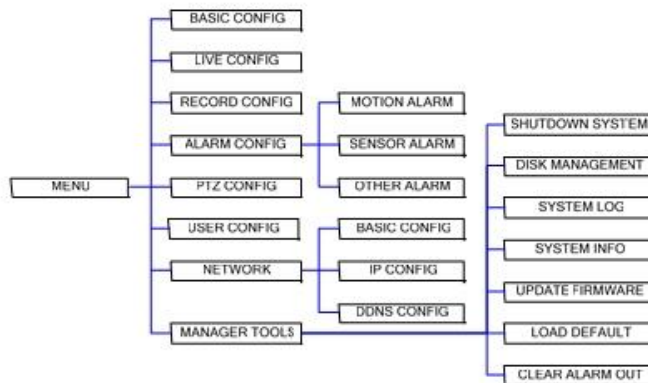


Fig3.3 Structure of Main Menu

### 3.2.1 Basic Configuration

Basic Configuration menu is shown in Fig3.4.

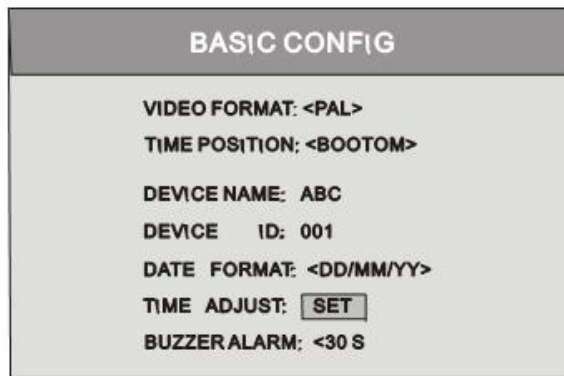


Fig3.4 Basic Configuration



Fig3.5 Time Adjust

#### 1. VIDEO FORMAT

After you enter the Basic Configuration menu, you need to set the video format. There are two options to choose: NTSC and PAL.

**STEP1** Press "Up", "Down", "Left" and "Right" buttons to move the cursor.

**STEP2** Press "Enter" key to change the video format.

#### 2. TIME POSITION

You can set display position of time. There are three options to choose:

- TOP: Time is displayed on top of the screen.
- BOTTOM: Time is displayed on the bottom of the screen.
- NO: Do not display time on the screen.

#### 3. DVR NAME

You can set DVR name. You can input the name using letters from 'a' to 'z' and numbers from '0' to '9'.

**STEP1** Press "**A**" button to switch the inputting mode

**STEP2** Modify the DVR name.

**STEP3** Press "**Enter**" key to confirm the operation.

#### 4. DVR ID

You can set the DVR ID. It consists of three numbers.

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Press "**Enter**" key to modify numbers.

**STEP3** Input three numbers, and press "**Enter**" key to confirm modifying the parameter.

**STEP4** Press "**OK**" button to confirm the operation.

#### 5. DATE FORMAT

There are three options to choose:

- Asian Date format: YY/MM/DD.
- European Date format: DD/MM/YY.
- American Date format: MM/DD/YY.

#### 6. TIME ADJUST


Time Adjust menu is shown in Fig3.5. You must stop recording first to adjust time.

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Use the number buttons to modify time.

You also can use "+" and "-" button to modify time.

**STEP3** Press "**Enter**" key to confirm the operation.

 **Notice:** If time that you adjust is less than current time, the record between adjusted time and current time will be deleted automatically.

#### 7. BUZZER ALARM

You can set the length of buzzer alarm. There are seven options to choose from: always, 5 seconds, 10 seconds, 30 seconds, 1 minute, 2 minutes and 4 minutes.

### 3.2.2 Live Configuration

Live Configuration menu is shown in Fig3.6 Live.

LIVE CONFIG	
CHANNEL :	<CAM1>
CHANNEL NAME :	<CAM1>
SHOW NAME :	<input checked="" type="checkbox"/>
CHANNEL HIDE :	<input checked="" type="checkbox"/>
BRIGHTNESS :	128
CONTRAST :	128
SATURATION :	128
HUE :	128
COPY CONFIG TO:	<ALL> <input type="button" value="COPY"/>
<input type="button" value="OK"/> <input type="button" value="CANCEL"/>	

Fig3.6 Live Configuration

## 1. CHANNEL

**STEP1** Press "Up", "Down", "Left" and "Right" buttons to move the cursor.

**STEP2** Press "Enter" key to switch to the channel that you want to set.

## 2. CHANNEL NAME

You can set the channel name. You can input the name using letters from 'a' to 'z' and numbers from '0' to '9'

**STEP1** Press "A" button to switch the inputting mode.

**STEP2** Input channel name.

**STEP3** Press "Enter" key to confirm the operation.

## 3. SHOW NAME

If you select "**SHOW NAME**" check box, the camera name will be displayed in live display mode. If you unselect "**SHOW NAME**" check box, the camera name will not be displayed.

## 4. CHANNEL HIDE

If you select "**HIDE**" check box, the picture from the channel will not be displayed in live display mode. But it is recorded. If you unselect "**HIDE**" check box, the picture will be displayed.

## 5. CHANNEL COLOR

Modify the contrast, brightness, saturation and hue of the picture.

#### 6. COPY CONFIG TO

Copy the configuration of this channel to any other selected channel or all channels.

**STEP1** Select the channel which this channel will be copied to.

**STEP2** Press "**COPY**" button.

**STEP3** Press "**Enter**" key to confirm the operation.

### 3.2.3 Record Configuration

Record Configuration menu is shown in Fig3.7. You can enter the menu to set the parameters for recording.

RECORD CONFIG	
VIDEO RESOLUTION :	<CIF>
RECYCLE :	<input checked="" type="checkbox"/>
PRERECORD TIME :	< 15 S >
TIME STAMP :	<input checked="" type="checkbox"/>
CHANNEL :	<CAM 1>
VIDEO QUALITY :	<HIGHEST>
AUDIO :	<input checked="" type="checkbox"/>
SCHEDULE RECORD :	<input checked="" type="checkbox"/> <b>SETUP</b>
FRAME RATE SETUP :	(FPS)
MANUAL :	< 25 >
MOTION :	< 25 >
COPY TO :	<ALL>
<div style="display: flex; justify-content: space-between;"> <span><b>OK</b></span> <span><b>CANCEL</b></span> </div>	

Fig3.7 Record Configuration

SCHEDULE SETUP	
WEEKDAY : <WEDNESDAY>	
WHOLE DAY:	<input type="checkbox"/>
00:00 TO 00:00:	00:00 TO 00:00:
00:00 TO 00:00:	00:00 TO 00:00:
COPY TO:	<ALL> <b>COPY</b>
HOLIDAY: <07-01>	<b>ADD</b> <b>DEL</b>
WHOLE DAY:	<input type="checkbox"/>
00:00 TO 00:00:	00:00 TO 00:00:
00:00 TO 00:00:	00:00 TO 00:00:
<div style="display: flex; justify-content: space-between;"> <span><b>OK</b></span> <span><b>CANCEL</b></span> </div>	

Fig3.8 Schedule Setup

#### 1. VIDEO RESOLUTION

The resolution of different video formats are: PAL: 352\*288(CIF); NTSC: 352\*240(CIF).

## 2. RECYCLE

If you select "**RECYCLE**" check box to have continuous recording, DVR will overwrite the oldest record when HDD is full. If you unselect "**RECYCLE**" check box, the DVR will stop recording when the HDD is full.

## 3. TIME STAMP

If you select the check box, record time will be displayed on the bottom of the screen when playing back the record.

## 4. PRERECORD TIME

Prerecord time is the record time before alarm. There are two options to choose: 5 seconds and 10 seconds.

## 5. CHANNEL

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Press "**Enter**" key to switch to the channel which you want to set.

## 6. VIDEO QUALITY

There are five options to choose from: lowest, lower, medium, higher and highest. The higher the picture quality is, the clearer picture is, but the HDD is filled at a faster rate.

## 7. AUDIO

If you select "**AUDIO**" check box, DVR will record audio when it records video. Otherwise it will not record audio.

 **Notice:** When you playback the record, you can press "**AUDIO**" button to switch on the sound of the corresponding channel.

## 8. SCHEDULE RECORD

Setup of Scheduled Recording is shown in Fig3.8.

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor to "**SCHEDULE RECORD**" option in the Record Configuration menu.

**STEP2** Select "**SCHEDULE RECORD**" check box.

**STEP3** Press "**Setup**" button to enter the Schedule Setup menu.

Press "**ESC**" button on the front panel to get back to upper menu.

**STEP4** In the Schedule Setup menu, press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP5** Press "**Enter**" key to enter the time set.

**STEP6** Press "**+**" and "**-**" buttons on the front panel to modify the time.

 **Notice:** When you use a mouse, you need to roll the middle wheel to modify the time.

**STEP7** Press "**Enter**" key to confirm the setup.

On weekday and holiday, you can select to record the whole day or set four time periods to record.

#### 9. FRAME RATE SETUP

Frame rate is number of pictures recorded per second. If you choose 15, the picture recording rate is 15 frames per second.

You can set frame rate for different recording modes.

If the video format is NTSC, there will be five frame rates to choose: 1, 3, 7, 15 and 30. The maximum frame rate is 30.

If the video format is PAL, there will be five frame rates to choose: 1, 3, 6, 12 and 25. The maximum frame rate is 25.

#### 10. COPY TO

You could copy the setting of this channel to any other selected channel.

### 3.2.4 Alarm Configuration

Alarm Setup menu is shown in Fig3.9. You can enter the submenu to set the parameters of the alarm.

#### MOTION ALARM

Motion Alarm submenu is shown in Fig3.10.

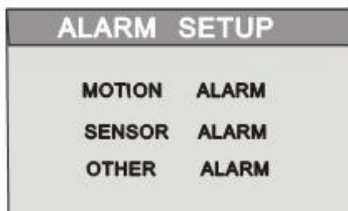


Fig3.9 Alarm Configuration

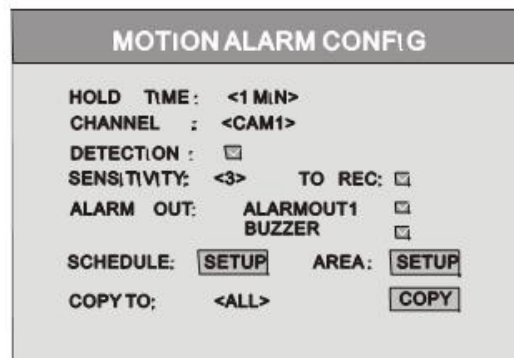


Fig3.10 Motion Alarm Configuration

#### 1. HOLD TIME

This sets the record time after the alarm occurs. There are two options to choose: 1 minute and 2 minutes. It also sets the time between alarms. If the HOLD TIME is 1 minute, the motion which is detected will only trigger the alarm once in 1 minute.

#### 2. CHANNEL

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Press "**Enter**" key to switch to the channel which you want to set.

#### 3. DETECTION

"**DETECTION**" checked means motion detection is activated, unchecked means motion detection is disabled.

#### 4. SENSITIVITY

This is the sensitivity of the motion detection.

The range is from '1' to '8'. The higher the value is, the higher the sensitivity is.

#### 5. TO REC

If select "**TO REC**" check box, DVR will record when there is a motion event. If not, DVR will not record.

#### 6. ALARM OUT

There are two alarm out options to choose: ALARMOUT1 and BUZZER.

#### 7. SCHEDULE

This is the schedule of the motion detection. The default schedule is everyday. Press "**SETUP**" button to set a motion detection schedule.

#### 8. AREA

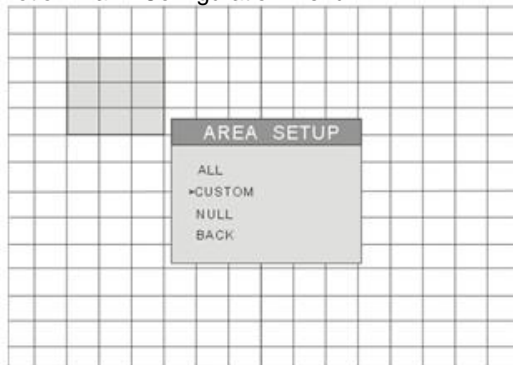
**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Press "**SETUP**" button to enter the Area Setup submenu.

It shows the setting of the detection area (refer to Fig3.11). The fuchsia color means the area is unselected. The transparent live area means the area is selected. There are four options in the Detection Area Setup:

- ALL: The entire area will be detected.
- CUSTOM: The area which you select will be detected.

- NULL: No area will be detected.
- BACK: Go back to Motion Alarm Configuration menu.




**Fig3.11 Detection Area Setup**

Substeps of manually selecting the detection area are described below:

1. In the Area Setup submenu, press "**Up**" and "**Down**" buttons to choose "**CUSTOM**" option.
2. Press "**Enter**" key to confirm the operation.
3. Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to choose the area which needs to be detected.
4. Press "**Enter**" key to select or cancel the area.
5. Press "**Esc**" button to confirm the option and exit "**CUSTOM**" option.

**STEP3** Press "**BACK**" option to go back the Motion Alarm Configuration menu.

 **Notice:** In Continuous recording mode, Manual Record and Alarm Record are activated at the same time. If an Alarm occurs, the DVR remains recording continuously. You can find the alarm event through '3.3.2 Search' function of '3 Search by Event' (Page 36).

#### 9. COPY TO

You can copy the setting of this channel to any other selected channel.

### SENSOR ALARM

Sensor alarm submenu is shown in Fig3.12. Every Sensor matches one or more channels.

SENSOR ALARM CONFIG			
HOLD TIME:	<1 MIN>		
SENSOR :	<SENSOR1>		
DETECTION :	<input checked="" type="checkbox"/>		
TYPE :	<NO>		
TRIGGER RECORD:	CAM1 <input checked="" type="checkbox"/>	CAM2 <input checked="" type="checkbox"/>	
	CAM3 <input checked="" type="checkbox"/>	CAM4 <input checked="" type="checkbox"/>	
ALARM OUT:	ALARMOUT1 <input checked="" type="checkbox"/>		
	BUZZER <input checked="" type="checkbox"/>		
SCHEDULE:		<b>SETUP</b>	
COPY TO:	<ALL>	<b>COPY</b>	
	<b>OK</b>	<b>CANCEL</b>	

Fig3.12 Sensor Alarm Configuration

#### 1. HOLD TIME

It sets the record time after the alarm occurred. There are two options to choose: 1 minute and 2 minutes. It also sets the record time after the motion ends. If the HOLD TIME is 1 minute, the sensor event which is detected will only trigger the alarm and create a new file after a 1 minute pause in motion.

#### 2. SENSOR

**STEP1** Press "Up", "Down", "Left" and "Right" buttons to move the cursor to "SENSOR" option.

**STEP2** Press "Enter" key to switch the Sensor.

#### 3. DETECTION

Switches on the sensor alarm. If you select "DETECTION" check box, DVR will begin detecting. If you unselect "DETECTION" check box, the detection function is disabled.

#### 4. TYPE

There are two options to choose: high and low. Press "Enter" key to enter the sub-menu. And there are two options to choose: NO and NC.

'NO' means normal open. If 'NO' is chosen, the DVR will send alarm when the alarm is in low level.

'NC' means normal close. If 'NC' is chosen, the DVR will send alarm when the alarm is in high level.

#### 5. TRIGGER RECORD

One channel can connect to one sensor. But one sensor can match one or more channels.

**STEP1** Press "Up", "Down", "Left" and "Right" buttons to move the cursor to "TRIGGER RECORD" option.

**STEP2** Select the check box of the channel which matches sensors.

**STEP3** Press "Enter" key to confirm the operation.

For example, if you select the sensor named SENSOR1 and the record triggers named CAM1 and CAM2, it will record on channel 1 and channel 2 when SENSOR1 is triggered.

#### 6. ALARM OUT

There are two options to choose: ALARMOUT1 and BUZZER.

- When ALARMOUT1 is selected and the sensor is triggered, the DVR will give a normal alarm.
- When BUZZER is selected and the sensor is triggered, the DVR will give a buzzer alarm.
- When the alarm output is unselected, DVR will not send an alarm.

#### 7. SCHEDULE

this is the schedule of the sensor detection. The default schedule is everyday.

#### 8. COPY TO

You can copy the setting of this channel to any other selected channels.

### OTHER ALARM

Other Alarm submenu is shown as Fig3.13. Other alarm includes video loss, disk full and so on.



Fig3.13 Other Alarm Configuration

There are two options of alarm output: ALARMOUT1 and BUZZER.

### 3.2.5 PTZ Configuration

PTZ Configuration menu is shown as Fig3.14.



Fig3.14 PTZ Configuration



Fig3.15 Preset

#### 1. CHANNEL

Switch to the channel which connects to the Speed Dome.

#### 2. BAUDRATE

There are five options of baudrate to choose from: 1200, 2400, 4800, 9600 and 19200.

#### 3. PROTOCOL

Choose the PTZ protocol. Currently supported protocols are: PELCO\_D, PELCO\_P, MINKING, NEON, STAR, VIDO, DSCP, VISCA and LILIN.

#### 4. ADDR

Set the PTZ address. Press "**Enter**" key and use the number key, "+" and "-" button to set it.

#### 5. PRESET

**STEP1** Press "**SET**" button to enter the Preset submenu which is shown as Fig3.15. There are 16 Presetting Points which can be set in every channel.

**STEP2** In the Preset submenu, press "**Enter**" button to switch the Presetting Point which needs to be reset.

**STEP3** Press "**ADJUST**" button to enter the PTZ mode.


**STEP4** On the front panel, press "**ZOOM**", "**FOCUS**", "**SPEED**", "**IRIS**", "**+**" (MENU) and "**-**" (PTZ) buttons to modify

position of the Presetting Point.

**STEP5** Press "**UP**", "**DOWN**", "**RIGHT**" and "**LEFT**" buttons to rotate the Speed Dome.

**STEP6** Press "**ESC**" button to come back to the Preset menu.

**STEP7** Press "**SAVE**" button to save the position of camera which you set as Presetting Point; press "**CANCEL**" button to discard the setting and get back to upper menu.

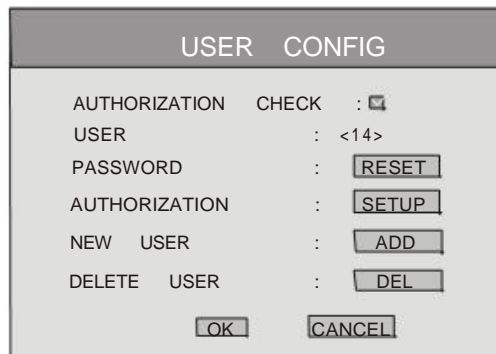
 **Notice:** You can use the number key to switch to the Presetting Point in PTZ mode. First, press "**PTZ**" button to enter the PTZ mode. Then you can press the number key such as "**1**", the Speed Dome will move to Presetting Point 1 which you set it in the above steps.

## 6. COPY TO

You can copy the setting of this channel to any other selected channel.

### 3.2.6 User Configuration

User Configuration is shown as Fig3.16. The default username is Admin. Admin can add users, set users' authorizations and delete users.



**USER CONFIG**

AUTHORIZATION CHECK : ☒

USER : <14>

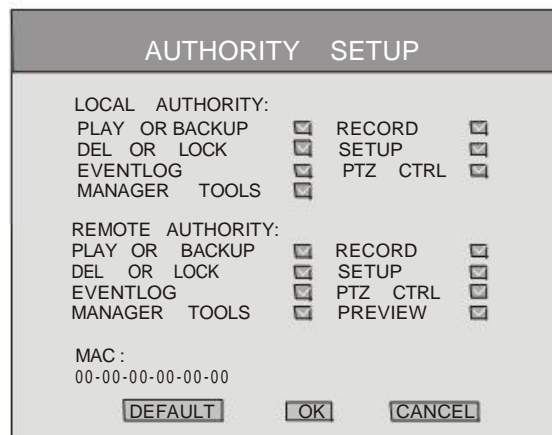
PASSWORD :

AUTHORIZATION :

NEW USER :

DELETE USER :

Fig3.16 User Configuration



**AUTHORITY SETUP**

LOCAL AUTHORITY:

PLAY OR BACKUP	<input checked="" type="checkbox"/>	RECORD	<input checked="" type="checkbox"/>
DEL OR LOCK	<input checked="" type="checkbox"/>	SETUP	<input checked="" type="checkbox"/>
EVENTLOG	<input checked="" type="checkbox"/>	PTZ CTRL	<input checked="" type="checkbox"/>
MANAGER TOOLS	<input checked="" type="checkbox"/>		

REMOTE AUTHORITY:

PLAY OR BACKUP	<input checked="" type="checkbox"/>	RECORD	<input checked="" type="checkbox"/>
DEL OR LOCK	<input checked="" type="checkbox"/>	SETUP	<input checked="" type="checkbox"/>
EVENTLOG	<input checked="" type="checkbox"/>	PTZ CTRL	<input checked="" type="checkbox"/>
MANAGER TOOLS	<input checked="" type="checkbox"/>	PREVIEW	<input checked="" type="checkbox"/>

MAC :  
00-00-00-00-00-00

Fig3.17 Authority Setup

#### 1. AUTHORIZATION CHECK

If you select "**AUTHORIZATION CHECK**" check box, all users need to input the password before entering the Main Menu.

If unselect "**AUTHORIZATION CHECK**" check box, users can enter the system directly without password.

#### 2. USER

Press "**Enter**" key to switch to another user. Using "+" and "-" buttons could also change the user.

#### 3. PASSWORD

Admin's default password is '123456'. Users with authorization can change the user's password. Password consists of numbers between 0 and 9.

#### 4. AUTHORIZATION

**STEP1** Move the cursor to "**User**" option, and press "**Enter**" key to switch to the user authorization you want to modify.

**STEP2** Move the cursor to "**SETUP**" button on the screen.

**STEP3** Press "**Enter**" key, Authority Setup menu (refer to Fig3.17) pops up.

**STEP4** In the Authority Setup menu, move the cursor to the "**DEFAULT**" button.

**STEP5** Press "**Enter**" key. The default authorization will be set.

The default user authorization contains:

- Live view, Playback or backup and Record in local system.
- Live view, Playback or backup and Record in remote Network Client.

#### 5. NEW USER

**STEP1** Move the cursor to "**ADD**" button on the screen.

**STEP2** Press "**Enter**" key, the Add User menu will display.

**STEP3** Input username and password.

**STEP4** Press "**OK**" button to confirm the option.

Username can consist of numbers and letters, with 15 characters maximum. Password consists of numbers between 0 and 9.

#### 6. DELETE USER

**STEP1** Move the cursor to the "**DEL**" button on the screen.

**STEP2** Press "**Enter**" key to confirm the operation. When a user is deleted, the username and password won't exist in the system any more.

### 3.2.7 Network Configuration

Network Configuration menu is shown as Fig3.18. You can enter the submenu to set the network parameters.

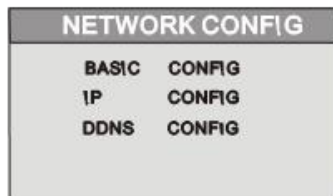


Fig3.18 Network Configuration



Fig3.19 Basic Configuration

#### BASIC CONFIGURATION

Basic Configuration submenu is shown as Fig3.19 above.

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Press "**Enter**" key to enter the Basic Configuration menu.

1. NET SERVER

If you select the check box and set the port number of the server, you would make the NET SERVER enable.

2. NET VIDEO QUALITY

This sets picture quality of remote surveillance. There will be three options to choose: low, medium and high. The higher the quality value is, the clearer the picture is, but the transfer size of the files is larger which requires more bandwidth.

#### IP CONFIGURATION

IP Configuration submenu is shown as Fig3.20.

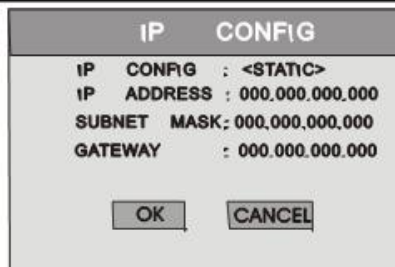


Fig3.20 IP Configuration

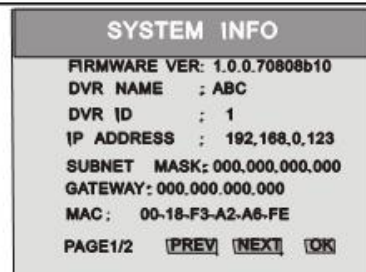


Fig3.21 System Information

This is the IP configuration of the DVR. There are three options to choose: STATIC, DHCP and PPPoE. Static IP address is shown in the example.

**STEP1** Press "Up", "Down", "Left" and "Right" buttons to move the cursor.


**STEP2** Input IP Address, Subnet Mask and Gateway.

**STEP3** Press "OK" button to modify the IP Configuration menu.

If selecting DHCP, the IP address will be automatically assigned by local network. After selecting DHCP, you need to wait about 30 seconds for the automatic assigned IP to be displayed on the system information window.

If selecting PPPoE, you need to set username and password when DVR connects to the internet. If you forget username and password, please contact your ISP (internet service provider).

If you press "INFO" button, the System Information menu will be displayed on the screen when the DVR connects to the network successfully (refer to Fig3.21).

 **Notice:** • If the network the DVR is connected to has the following items, we recommend using Dynamic IP.

1. The local area network has DHCP server.

2. DVR can get IP address automatically from internet.

• Before you set PPPoE, you need to reboot the modem. After setting the PPPoE, you need wait for the program to accept the setting.

## DDNS CONFIGURATION

DDNS Configuration submenu is shown as Fig3.22. The DVR supports DDNS server-'88IP.net'. To

Use DDNS, user needs to get a domain name from the ISP (internet service provider) whose protocol is used in the DVR.

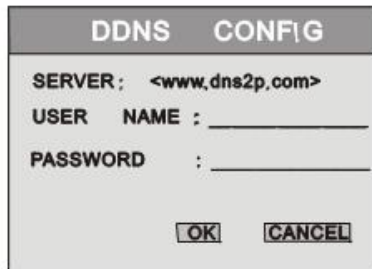



Fig3.22 DDNS Configuration

 **Notice:** The actual ISP list may be different from each vendor.

Take the 'dns2p.com' as an example. If different from the below example, please connect with your Domain Name Service Provider to be guided how to get the domain.

1. Apply the Domain Name

(1) Register in the Web

**STEP1** Fill in the blank of IE address with 'www.dns2p.com'.

**STEP2** Click  to enter the website.

**STEP3** Click "New User" in the right of the homepage to register. For example: User ID is 'abc', and password is '123456' (refer to Fig3.23).

## Register

User ID	<input type="text" value="abc"/>	*
Resolve Type	<input type="text" value="mongline"/>	*
Password	<input type="password" value="*****"/>	*
Confirm Password	<input type="password" value="*****"/>	*
Name	<input type="text"/>	
City	<input type="text"/>	*
Country	<input type="text" value="Philippines"/>	
Company Name	<input type="text"/>	*
E-mail	<input type="text"/>	*
Address	<input type="text"/>	
Code	<input type="text"/>	
Tel 1	<input type="text"/>	*
Tel 2	<input type="text"/>	
<input type="button" value="register"/> <input type="button" value="reset"/>		

Fig3.23 Register Page

Username:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Enter"/> <input type="button" value="Register"/>	
<a href="#">Forget Password</a>	

Fig3.24 Login Page

## (2) Login

**STEP1** Return to homepage after registering successfully.

**STEP2** Click "**Account Manager**" on the right side of homepage to login (refer to Fig3.24).

**STEP3** Input the username and password with the information that you have registered.

**STEP4** Click "**Enter**" key after filling in the textbox.

## (3) Domain Setup

**STEP1** Click "**Domain Management**" on the left to set the domain (refer to Fig3.25).

Domain:	<input type="text" value="www."/>	<input type="text" value=". dns2p. com"/>	<input type="button" value="Submit"/>
---------	-----------------------------------	---	---------------------------------------

Fig3.25 Domain Setup

**STEP2** Input the domain in the textbox. For example, you set 'dvr' as the domain.

**STEP3** Click "**Submit**" button, the system will pop up a dialog box to show that the domain was added successfully

(refer to Fig3.26).



Fig3.26 Dialog Box

**Notice:** The trial period is one month. If user wants to use it after one month, he needs to click "**Buy Now**" in the right of homepage to pay for it.

## 2. Setup in the DVR

### (1) DOMAIN

Domain is set in '1 Apply the Domain Name'. According to the example above, the domain is 'dvr.dns2p.com'.

### (2) USER ID

Username of registered which is set in '(1) Register in the Web'. According to the example above, user ID is 'abc'.

### (3) PASSWORD

Password is set in '(1) Register in the Web'. According to the example above, password is '123456'.

**Notice:** If the connection fails, press the "**INFO**" button, the system will display: 'DDNS NONE'. Then you need to check network and information above and try again.

## 3. Application

**STEP1** Connect DVR to the Network Client.

**STEP2** After popping up the login interface, fill in "**Server**" textbox with ' \*.dns2p.com' to visit the Network Client of the DVR.

'\*' is the domain which is set in '(3) Domain Setup'. According to the example above, fill in "**Server**" textbox with ' dvr.dns2p.com'.

### 3.2.8 Management Tools

Manager Tools menu is shown in Fig3.27. You can enter the submenu to set the parameters of network.



Fig3.27 Manager Tools



Fig3.28 Disk Management

### SHUTDOWN SYSTEM

You could shut down system through this function.

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor for entering the SHUTDOWN submenu.

The following words will be shown: 'ARE YOU SURE TO SHUT DOWN DVR SYSTEM?'.

**STEP2** Press "**Enter**" key to confirm the operation.

### DISK MANAGEMENT

Disk Management submenu is shown in Fig3.28 Disk. There are two options to choose: FORMAT and CANCEL.

#### 1. QUICK FORMAT

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Select "**QUICK Format**" check box.

#### 2. FORMAT

**STEP1** Press "**Up**", "**Down**", "**Left**" and "**Right**" buttons to move the cursor.

**STEP2** Select "**FORMAT**" button.

**STEP3** Press "**Enter**" key, a warning will pop up: 'FORMAT WILL ERASE ALL DATA ON THIS HDD! FORMAT NOW? '

**STEP4** Press "**OK**" button to format the HDD; Press "**CANCEL**" or "**ESC**" button to cancel this operation.

**Notice:** •When HDD is used for the first time, system will remind user to format the HDD when the DVR starts up. And HDD can record after the



HDD is formatted.

- Before you format the HDD, you must stop recoding and playing back.
- Time required for formatting the HDD is depends on the HDD capability. The bigger the capability is, the longer the time required. Normally, a 40G HDD takes about eighty seconds to format.

## SYSTEM LOG

System log submenu is shown in Fig3.29. You can search the operation log on the DVR. The DVR will note the operation, status and time automatically when the DVR is working. After entering the submenu, you need to select the operation and status type for which you are searching.

LOG SEARCH			
LOCAL:	LOG IN:	<input type="checkbox"/>	CONFIG <input type="checkbox"/> PB <input type="checkbox"/>
	PTZ :	<input type="checkbox"/>	DEL LOCK <input type="checkbox"/>
NET:	LOG IN:	<input type="checkbox"/>	CONFIG <input type="checkbox"/> PB <input type="checkbox"/>
	PTZ :	<input type="checkbox"/>	DEL LOCK <input type="checkbox"/>
OTHER:	SYS:	<input type="checkbox"/>	VLOSS: <input type="checkbox"/> DISK <input type="checkbox"/>
START TIME:	11-08-2007 00:00:00		
END TIME:	11-08-2007 22:00:00		
		<input type="button" value="OK"/>	<input type="button" value="CANCEL"/>

Fig3.29 Log Search

SYSTEM INFO	
FIRMWARE VER:	1.0.0.70808b10
DVR NAME :	ABC
DVR ID :	1
IP ADDRESS :	192.168.0.123
SUBNET MASK:	000.000.000.000
GATEWAY :	000.000.000.000
MAC:	00-18-F3-A2-A6-FE
PAGE1/2	<input type="button" value="PREV"/> <input type="button" value="NEXT"/> <input type="button" value="OK"/>

Fig3.30 System Information

### 1. TYPE

Type of the log file. Move the cursor to the log file types you are searching, press "**Enter**" key to select the types. The default setting is select all types. For example:

### 2. TIME

Beginning time and ending time of the log file.

**STEP1** Select the types of the log.

**STEP2** Select start time and end time.

**STEP3** Press "**Up**", "**Down**", "**Right**" and "**Left**" buttons to move cursor.

**STEP4** Press "**OK**" button to view the event log; Press "**CANCEL**" or "**ESC**" button to cancel this operation.  
The information on log files contain start time, end time and log file types. For example: 110707:092151 means 2007-7-11 9:21:51 and N-L means the LOGIN on the NET.

If there are too many log lists, users can use "**PREV**" button to page up and use "**NEXT**" button to page down.

## SYSTEM INFORMATION

System information submenu is shown in Fig3.30. It displays the information about the system, such as firmware version, device name, DVR IP ADDRESS, Client information and so on.

Press the "**INFO**" button on the front panel, it will display the system information on the screen.

## UPDATE FIRMWARE



**Fig3.31 Update Firmware**

Update Firmware submenu is shown in Fig3.31. You can use USB disk to update the firmware.

Before using USB disk to update, please make sure the firmware is on the USB disk. Steps are described below

- STEP1** Make sure the updating firmware is on the USB disk.
- STEP2** Enter the menu after word-'USB' is displayed on the live mode.
- STEP3** Press "**Up**" and "**Down**" buttons to move the cursor on "**UPDATE**" button.
- STEP4** Press "**Enter**" key to start updating.  
Progress of backup is shown in Fig3.32.

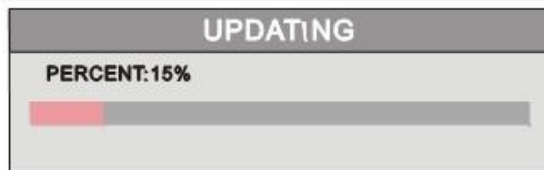


Fig3.32 Updating

**STEP5** After the program update is done, the system will restart. When the DVR reboots it is updated.

### LOAD DEFAULT

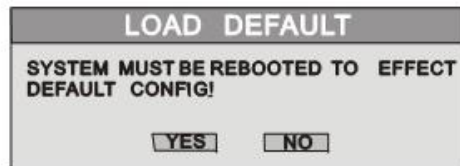


Fig3.33 Load Default

Load Default menu is shown in Fig3.33. It loads the factory default setup.

### CLEAR ALARM OUT

Clear the current alarm out, refer to Fig3.34.



Fig3.34 Clear Alarm Out

## 3.3 Shortcut Menu

### 3.3.1 PTZ



Fig3.35 PTZ Mode

PTZ mode is shown in Fig3.35. In order to switch to the channel which connects to the video output of the Speed Dome, you press the **"PTZ"** button to enter the PTZ mode.

In the live view of PTZ mode, the default channel is channel 1, you can use a mouse to change the channel number to enter the corresponding channel of PTZ mode.

#### SPEED

**STEP1** In PTZ mode, press **"Speed"** button.

**STEP2** Press **"+"** and **"-"** buttons to change the rotational speed.

**STEP3** Press **"Up"**, **"Down"**, **"Left"** and **"Right"** buttons to rotate the Speed Dome to a certain position.

#### ZOOM

**STEP1** In PTZ mode, press **"ZOOM"** button.

**STEP2** Press "+" and "-" buttons to zoom in and zoom out.

## FOCUS

**STEP1** In PTZ mode, press "**FOCUS**" button.

**STEP2** Press "+" and "-" buttons to control focus.

## IRIS

**STEP1** In PTZ mode, press "**IRIS**" button.

**STEP2** Press "+" and "-" buttons to control the amount of light of the Speed Dome.

## 3.3.2 Search

Press the "**Search**" button, there are five submenus displayed on the screen: PLAYBACK, BACKUP, DELETE and LOCK. Data menu is shown in Fig3.36.

### PLAYBACK

1. Select the Date

**STEP1** In Data menu, press "**Up**" and "**Down**" buttons to move the cursor.

**STEP2** Press "**Enter**" key to enter the Calendar submenu.

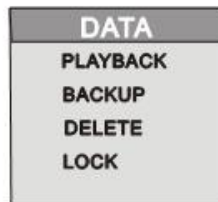


Fig3.36 Data



Fig3.37 Calendar

Calendar submenu is shown in Fig3.37.

 **Notice:** You can search for the record you need by time search or event search. The time displayed in red has a record file.

2. Search by Time

All the records can be searched through this function. Steps to search by time are below:

- STEP1** In Calendar submenu, press **"Up"**, **"Down"**, **"Right"** and **"Left"** buttons to select date.  
**STEP2** Press **"Enter"** key to enter the Playback submenu, refer to Fig3.38.  
**STEP3** Press **"Enter"** key to select channels.  
**STEP4** Press **"Up"**, **"Down"**, **"Right"** and **"Left"** buttons to select the date you want to search.  
 The time in red has record file. The first line is hours, and the second line is minutes.  
**STEP5** Press **"Up"**, **"Down"**, **"Right"** and **"Left"** buttons to move the cursor, and select the **"PLAY"** button.  
**STEP6** Press **"Enter"** key to play the record.


 **Notice:** • It only supports playing back in large picture mode. You can use **"Up"**, **"Down"**, **"Left"** and **"Right"** buttons to switch the channels.  
 • When you play back the record, you can press **"INFO"** button on the front panel to play or stop channel audio.



Fig3.38 Playback

### 3. Search by Event

You can search the motion detection records and sensor alarm records by event. Steps for searching by event are below:

- STEP1** In Playback submenu, select the camera and date. The dates which have event records are highlighted in red.  
**STEP2** Press **"Up"**, **"Down"**, **"Right"** and **"Left"** buttons to move the cursor to event option.  
 Event search types: MOTION and SENSOR.  
**STEP3** Press **"Down"** button to move the cursor to **"EVENTS"** button in the submenu.  
**STEP4** Press **"Enter"** key to enter the event list.  
**STEP5** Analyze the list information.  
 Taking one of the event records information as example. Meaning of the words are described below:

- CH: Channel.
- START TIME: The start time of the record.
- TYPE: The type of the event. There are two types of events: MOTION and SENSOR. -
- M: Motion detection.
- A: Sensor detection.
- LOCK: Lock status of files.

**STEP6** Press "Up" and "Down" buttons to choose the event record.

**STEP7** Press "Enter" key to play back the record which is chosen.

**STEP8** Press "Stop" button to get back to live display mode.



**Notice:** If event list is more then one page, use "PREV" and "NEXT" buttons to view previous and next page.

## BACKUP&VIEW BACKUP

### 1. BACKUP

Select the Backup submenu in the Data menu to enter the Backup submenu which is shown in Fig3.39.

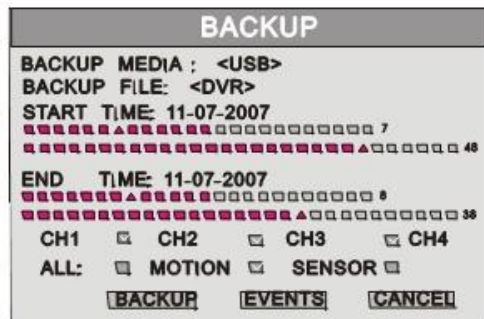


Fig3.39 Backup

### (1) BACKUP MEDIA

Press "Enter" button to modify the backup media used to backup the record. There are five options to choose: DVD-R, DVD-RW, DVD+R, DVD+RW and USB disk. They connect with DVR through USB interface.

### (2) BACKUP FILE

This selects the format of backup file. It supports AVI and DAT video format. When you select DVR, the video format of backup file will be DAT.

(3) START TIME

Start recording time to backup. The first line is hour, and the second line is minute. You must choose the date first and choose the time second.

(4) END TIME

End recording time to backup. The first line is hour, the second line is minute. You must choose the date first and choose the time second.

(5) CHANNEL

If you want to backup one or more channels, please select the channels which you want to backup.

(6) EVENTS

There are two options to choose: motion and sensor. If you want to backup all records, select "**ALL**".

(7) BACKUP

After selecting the BACKUP MEDIA, BACKUP FILE, CHANNEL, START TIME, END TIME and EVENTS, DVR is ready to backup.

**STEP1** Enter the menu after word-'USB' is displayed as the live mode.

**STEP2** Press "**BACKUP**" button, the backup information of DVR will display on the screen (refer to Fig3.40).



Fig3.40 Backup Information

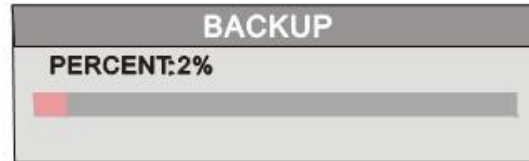


Fig3.41 Backup Progress

**STEP3** Press "**START**" button, backup starts.

Backup progress will be displayed on screen, as soon in Fig3.41. If you stop recording while you backup the record files, the backup speed will be faster.

**STEP4** When the backup is over, the system will display a dialog box. The sentence in the dialogue is as follows: 'BACKUP COMPLETELY'.

## 2. VIEW BACKUP

If backed up in AVI format, most media players can view directly.

If backup with DVR format, please use the client software to view.

(We also supply extra software, DVR player, which can play AVI and DVR format, we suggest you utilize DVR player to play both format recordings).

## DELETE

Delete submenu is shown in Fig3.42. You can delete selected records in the Delete submenu.



Fig3.42 Delete

**STEP1** In Data menu, press "Up", "Down", "Right" and "Left" buttons to move the cursor, the submenu selected will be

displayed in yellow.

**STEP2** Press "**Enter**" key to enter the Delete submenu.

**STEP3** In the Delete submenu, use "**UP**" and "**DOWN**" buttons to move the cursor.

**STEP4** Press "**Enter**" key to select the record.

**STEP5** Move the cursor to "**DELETE**" button and press "**Enter**" key, dialog box will display the message: 'SOME RECORDS WILL BE DELETED, CONTINUE?'

**STEP6** Press "**Left**" and "**Right**" buttons to select "**OK**" button.

**STEP7** Press "**Enter**" key to delete the selected record.

## LOCK/UNLOCK

Lock submenu is shown in Fig3.43. Use this to lock or unlock the record.

LOCK				
DATE : 11-07-2007				
ORDER:<CHANNEL>				
CH START TIME		TYPE LOCK		
1	2007-07-11	19:42:27		
▶ 1	2007-07-11	19:45:30	M	LOCK
1	2007-07-11	19:50:45		
1	2007-07-11	19:56:23	M	
1	2007-07-11	19:58:45		LOCK
1	2007-07-11	20:12:27		
1	2007-07-11	20:15:30	M	
1	2007-07-11	20:17:45		LOCK
1	2007-07-11	20:20:23	M	
1	2007-07-11	20:28:45		
PAGE1/10				
		FIRST	LAST	
PREV		NEXT	DELETE	
		CANCEL		

Fig3.43 LOCK/UNLOCK

Use "**Enter**" key to change the state. If the record event is locked, the record can not be deleted or overwritten.

### 3.3.3 Information

Press the "**INFO**" button, status information will appear on the screen including, HDD quantity, usable rate

of HDD, record mode including manual/alarm/motion etc.

#### 3.3.4 Other

- In live display mode, if you press the "**Up**" button, it will display the first channel full screen.
- If you press the "**Down**" button, it will display the second channel full screen.
- If you press the "**Left**" button, it will display the third channel full screen.
- If you press the "**Right**" button, it will display the fourth channel full screen.
- If you press the "**Enter**" button, it will display the four channels in quad mode.
- If you press the "**Audio**" button, it will switch the audio for corresponding channel in live display mode.

## CHAPTER 4 Remote Surveillance

### 4.1 Accessing DVR

Our DVR supports control through an Internet Explorer (IE) browser, to access through IE you need to download and install ActiveX controls for remotely controlling the DVR.

Before remotely controlling the DVR, you need to connect the DVR to the router by Ethernet cable. If you access the DVR through the internet, you need to setup DVR and router parameters first (Refer to Appendix D).

DVR can support five users logging in and operating the Network Client at the same time.

#### 4.1.1 Accessing DVR through a local network (LAN) (Refer to Appendix D for DVR network setup)

When your computer is connected to a LAN, you can access DVR through an IE browser by following these steps:

**STEP1** Double-click the IE browser icon to open the IE browser.

**STEP2** Put the IP address of the DVR in IE address bar and press "Enter" key.

**STEP3** Install ActiveX controls in displayed page.

**STEP4** After installation is completed, the system will connect to DVR automatically. It will display the Network Client interface, refer to Figure4-1.

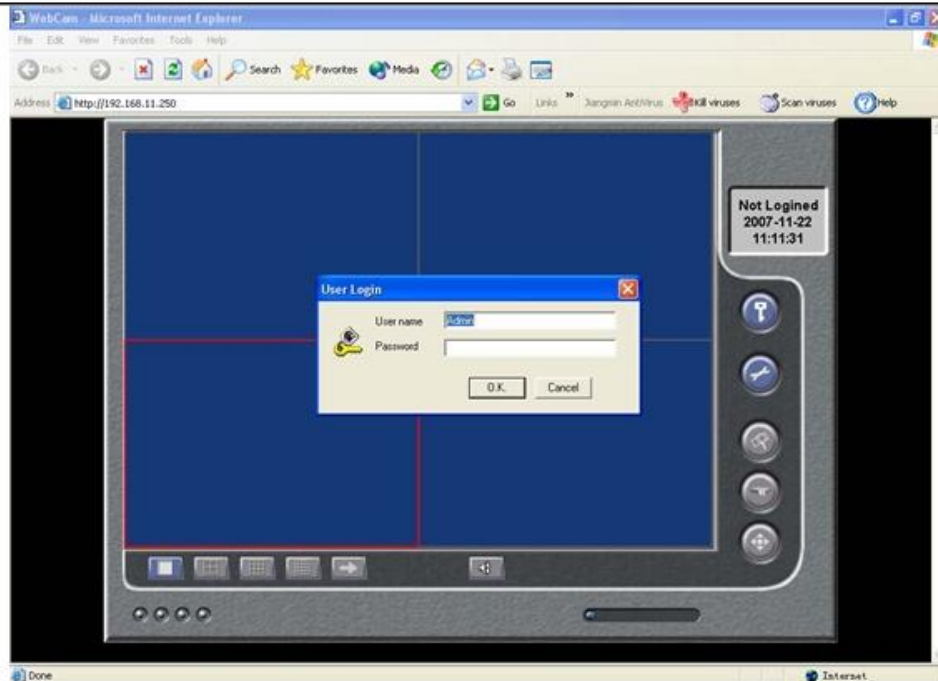


Figure4-1 Network Client Interface

#### 4.1.2 Accessing DVR through the Internet (WAN) (Refer to Appendix D for network setup and port forwarding)

When you access DVR in WAN, you need to set safety certificates first.

**STEP1** Double-click the IE browser icon to open the IE browser.

**STEP2** Select 'tools > Internet Options' in menu bar, it will display "**Internet Options**" window, refer to Figure4-2.



Figure4-2 Internet Options

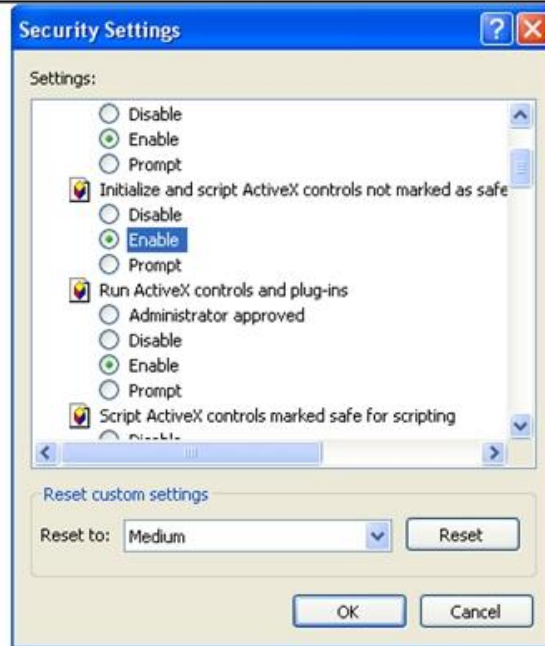


Figure4-3 Security Settings

**STEP3** Click "**Security**" option, and click "**Custom Level...**" in "**Security level for this zone**", it will display "**Security Settings**" window, refer to Figure4-3.

**STEP4** In "**Security Settings**" window, enable the options which relate to ActiveX controls.

**STEP5** Click "**OK**", finish setting the parameters.

**STEP6** Input IP address of the DVR in IE address bar, then press "**Enter**"key.

**STEP7** ActiveX controls will automatically install in displayed page.

**STEP8** The system will access the DVR automatically after finishing installation. The Network Client interface will be displayed in IE browser, refer to Figure4-1.

**Notice:** When the Network Client is running on VISTA operating system, you also need set relational ActiveX parameters. Steps for setting parameters are as follows:

1. Open IE browser, then select 'Internet Options > Advanced > Security'.
2. Enable 'Allow software to run or install even if the signature is invalid' and 'Allow active content to run in files on my computer'.
3. Click "OK" to finish the settings.

## 4.2 Main Interface

The function buttons of the remote surveillance software are shown in Fig4.2.

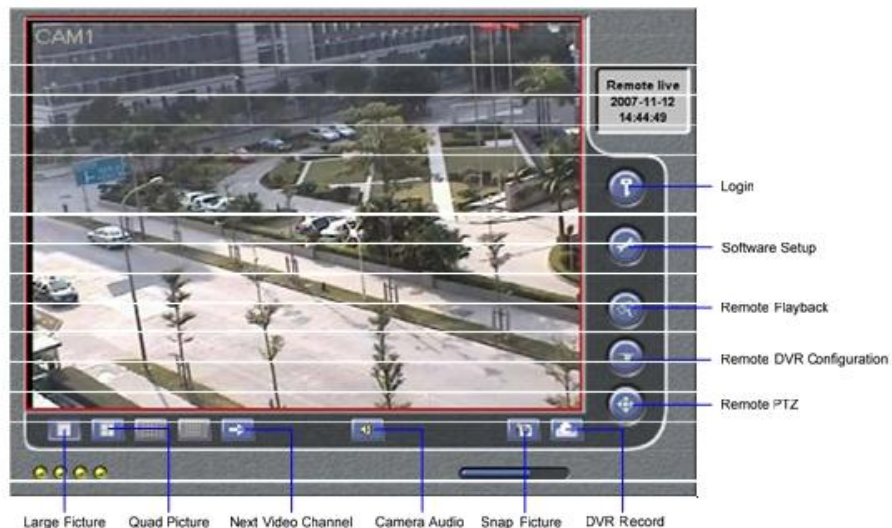




Fig4.2 Main Interface

#### 4.2.1 Login

The operation of the Network Client is the same as the DVR. Default username is 'Admin' and password '123456'.

**STEP1** Click  button to input username and password in the pop-up box.

**STEP2** Press "**Enter**" key to login.

 **Notice:** Click "**EXIT**" button, to exit the system.

#### 4.2.2 Snap Picture

Snap live picture. Press  to snap the picture.

#### 4.2.3 Parameter Settings

In the Parameter Settings window you can set how many picture you snap at once. If you select 5, you can snap five pictures every time when you click "**Snap Picture**" button.

#### 4.2.4 Record

**STEP1** Click "**DVR Record**" button.

**STEP2** Select "**Start Record**" in drop down list to record.


**STEP3** Select "**Stop Record**" in drop down list to stop recording.

#### 4.2.5 Camera Audio

You can set to open or close the camera's audio option.




**STEP1** When you are in live display mode or playback mode, select a channel to display in Large Picture mode.



**STEP2** Right-click the picture, and select "**Open Audio**" to play the camera's audio.

**STEP3** Click  button to turn the audio up or down.

#### 4.2.6 DVR Status Panel


Meaning of the colors for indicator lights in the Main Interface are shown below:

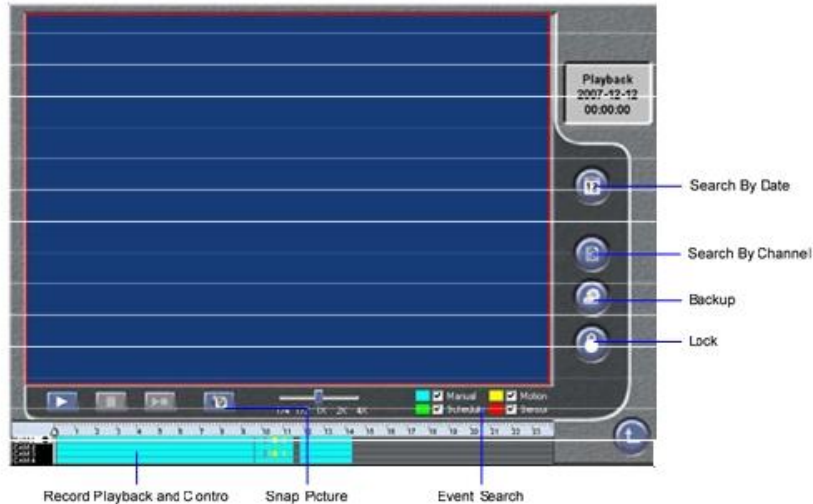
1.  Grey indicator light: Normal State.
2.  Green indicator light: Manual Record State.
3.  Yellow indicator light: Motion Detection Record State.

4.  Red indicator light: Sensor Alarm Record State.
5.  Blue indicator light: Video Loss State.

## 4.3 Remote Playback and Search

### 4.3.1 Remote Playback

Click  button in the Main Interface to enter remote playback mode which is shown in Fig4.3.



**Fig4.3 Remote Playback**

Meaning of the function buttons in the Remote Playback window are shown below:

1. : Play /Pause.



2.  : Stop.
3.  : Next frame. This button can be accessed when playback is paused.
4. You can select playback speed for playing the record as shown in Fig4.4.



Fig4.4 Multiple speed of Playback



Fig4.5 Data Preview

Fig4.5 Data Preview shows the record data of different channels in the same time frame. In the figure, left side shows the available channels. When certain channel has been selected for playback, the background color will be highlighted and ' • ' sign will appear beside the channel title.

The data preview area at the center gives details of the record files. Different colors of the bar show different types of records. The definitions of the color bars are:

 Blue: Manual Record Events

 Green: Schedule Record Events

 Yellow: Motion Detection Record Events

 Red: Sensor Alarm Record Events

The ruler on top of the bar shows the hours of the day. Right-click the ruler, it will be magnified to multiples of 10 allowing users can see the time marks in detail.

**STEP1** To search for a certain section of the record, draw the bar to the desired position. If necessary, right-click the bar to see the magnified time marks for a precise search.

**STEP2** Click  button to play the selected record.

When you return to live display mode after finishing remote playback, it may display the word-'connect...' on the screen. And you may click "**Large Picture**" or "**Quad Picture**" button to refresh screen to get a live picture.

### 4.3.2 Other Functions

#### BACKUP

Click  button to enter the Backup window which is shown in Fig4.6.

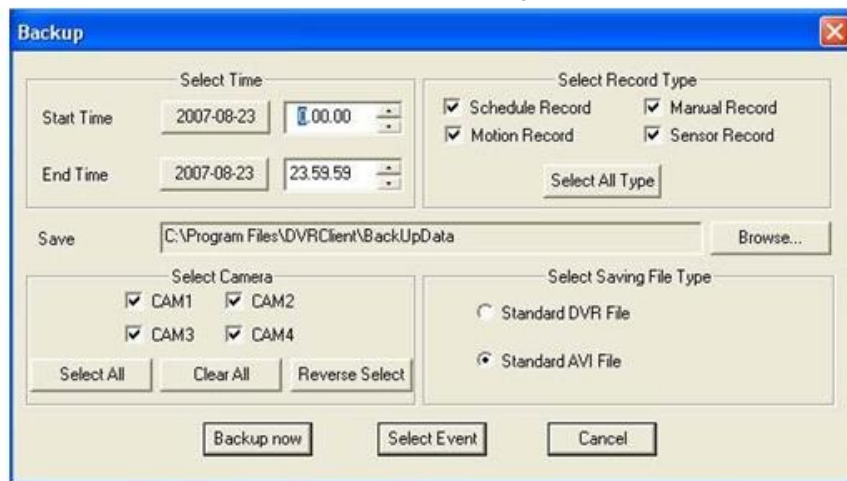


Fig4.6 Backup

There are two methods of backup: backup by time and backup by event.

#### 1. TIME BACKUP

**STEP1** Select the time.

**STEP2** Select the record type.

**STEP3** Press "**Browse...**" button to select the folder to save the Backup file.

**STEP4** Select cameras that you want to backup.

**STEP5** Select the type of backup file.

**STEP6** Click "**Backup Now**" button, backup progress pops up.

## 2. EVENT BACKUP

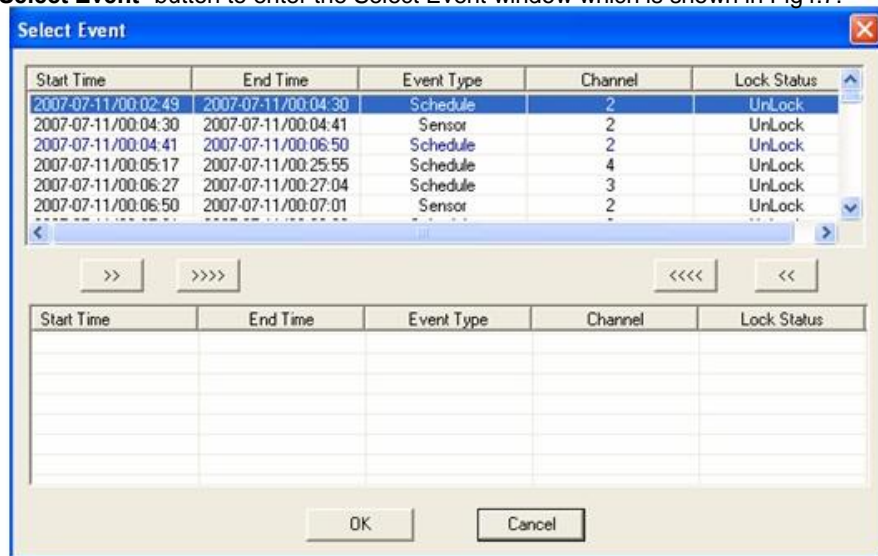
**STEP1** Select the time.**STEP2** Select the record type.**STEP3** Press "**Browse...**" button to select the folder to save the Backup file.**STEP4** Select cameras which you want to backup.**STEP5** Select the type of backup file.**STEP6** Click "**Select Event**" button to enter the Select Event window which is shown in Fig4.7.

Fig4.7 Select Event

1. Choose from event list and press ">>" button to move to backup list, showed in the bottom box; Click ">>>>" to choose all events.
2. Choose from event list and press "<<" button to clear selected event; click "<<<<" button to clear all events.

**STEP7** Click "OK" button to run the backup.

## LOCK /UNLOCK

You can select the records that you want to lock/unlock.

**STEP1** Click  button to enter the Remote Lock window in Fig4.8.

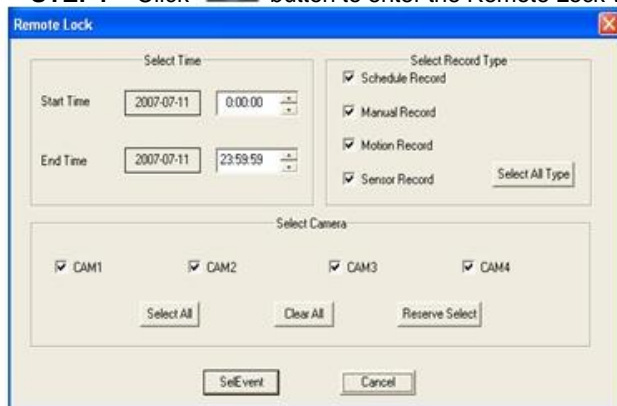


Fig4.8 Remote Lock



Fig4.9 Lock Event

**STEP2** Select the time and record type.

**STEP3** Select the camera.


**STEP4** Click "Select Event" button, the system will find the corresponding event and it will display the LOCK EVENT window which is shown in Fig4.9.

**STEP5** Selecting the check box can change the lock status.

Lock Status shows '✓' to indicate that the event is locked, otherwise it means unlocked.

**STEP6** Click "OK" button to confirm the operation in the Lock Event display.

## 4.4 Remote DVR Configuration

Click  button in the Main Interface to enter remote DVR configuration which is shown in Fig4.10



**Fig4.10 Remote DVR Configuration**

The functions of the buttons in Fig4.10 are shown below:



System Configuration



Live configuration



Record Configuration



Alarm Configuration



PTZ Configuration



User Configuration




Management Tools



Return

The Remote DVR Configuration can change the settings of the DVR remotely. The operation is the same as on the DVR.

#### 4.4.1 Basic Configuration

Click  button in the Remote DVR Configuration to enter the Basic Configuration which is shown in below Fig4.11

After you change parameters in the Basic Configuration window, click "**OK**" button, the setting will be saved and set on the DVR.



**Fig4.11 Basic Configuration**

1. Video Format

Select the option in the drop down list to change the video format of DVR. There are two video formats: PAL and NTSC.

2. Time Position

Select the option in the drop down list to change the position of the time display on the DVR.

3. DVR Name

Input letters to change the name of th DVR.

## 4. DVR No.

When you have more than one DVR, you can give a number to every DVR.

## 5. Date Format

Select the option in the drop down list to change the format of the date. There are three date formats: YY/MM/DD, DD/MM/YY and MM/DD/YY.

## 6. Buzzer

Select the option in the drop down list to change the length of time the buzzer will sound.

#### 4.4.2 Live Configuration


Click  button in the Remote DVR Configuration, the drop down menu will appear. The options are the Live Configuration window and Color Settings window which are shown below as Fig4.12 and Fig4.13.



Fig4.12 Live Configuration

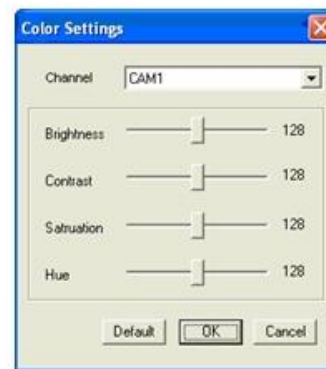


Fig4.13 Color Settings

#### LIVE CONFIGURATION

## 1. Channel

Use the drop down list to change the camera channel

## 2. Channel Hide

Select the check box to change be hidden or shown status of the camera in the live display mode.

## 3. Show Name

Select the check box to hide or display the name of the camera in the live display mode.

## 4. Channel Name

Input letters to change the name of the channel.

### COLOR SETTINGS

#### 1. Channel

Select the camera in the drop down list.

#### 2. Brightness /Contrast /Saturation /Hue

You can adjust the brightness, contrast, saturation and hue for every channel by using the slider.

### 4.4.3 Record Configuration

Record Configuration window is shown in Fig4.14.



Fig4.14 Record Configuration

### 1. Parameter Settings

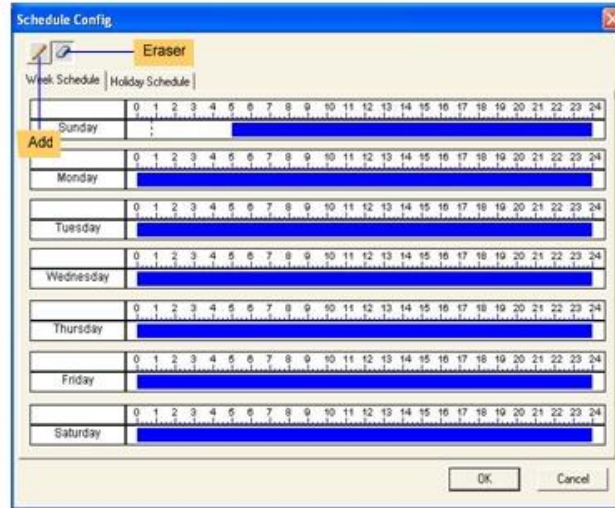
The setting is the same as '3.2.3 Record Configuration' of the DVR. If you change it on Network Client, the DVR will change along with it.

### 2. Schedule Record

The default value of Schedule Record is not active.

**STEP1** Click the check box of the Schedule Record, it will be active. The default schedule time is every day.


**STEP2** Click the **"Set Schedule"** button, the Schedule Configuration window will display as shown in Fig4.15.




**Fig4.15 Schedule Configuration**

**STEP3** Click **"Eraser"** button and click on the weekday schedule to delete the time; Click **"Add"** button and click on the weekday schedule to add the time.

#### 4.4.4 Alarm Configuration

Click  button in the Remote DVR Configuration, the drop down menu will appear. Options are Motion Alarm window, Sensor Alarm window and Other Alarm window. The settings are the same as '3.2.4 Alarm Configuration' of the DVR. If you change it here, the DVR will change along with it.


#### 4.4.5 Network Configuration

Click  button to change the video quality of the Network Client in the Network Configuration window.

#### 4.4.6 User Configuration

The settings of User Configuration window are the same as '3.2.6 User Configuration' of the DVR. The added users in the server can login to the Server and Client.

#### 4.4.7 Management Tools

Click  button in the Remote DVR Configuration, the drop down menu will appear. Options are Disk Management window, Software Update window, Load Default window, System Information window and System Log window.

### DISK MANAGEMENT

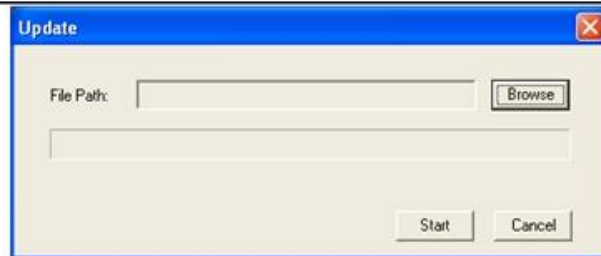
It displays the information of the hard disk.

### SOFTWARE UPDATE

DVR firmware can be updated remotely through Network Client software.

**STEP1** Select the path to the update file.

**STEP2** Click the "**Start**" button, the update progress will appear. The Update dialog box is shown as Fig4.16.

**Fig4.16 Software Update**

**STEP3** After update finishes, DVR needs to be rebooted to apply the new firmware.

#### **LOAD DEFAULT**

Load default setup to return to factory configuration.

#### **SYSTEM INFORMATION**

It displays the information of the DVR, such as version, DVR name, MAC address, and so on.

#### **SYSTEM LOG**

It displays the information about operating information on the DVR.

## **4.5 Remote Software Control of PTZ (Pan, Tilt, Zoom Cameras)**

#### **PARAMETERS**

Before operating the Remote PTZ, you should set the PTZ configuration. PTZ Configuration window is shown in Fig4.17.



**Fig4.17 PTZ Configuration**

1. Channel

To set PTZ controls, enter the PTZ configuration window and select the corresponding channel.

2. Baud Rate

This sets the Baud Rate of the PTZ camera. The default value is 9600.

3. Protocol

This sets the communication protocol of the PTZ camera.

4. Address

This sets the communication address of the PTZ camera.




**Notice:** Baudrate and protocol should be found in PTZ camera user's manual.

## PTZ CONTROL INTERFACE














Fig4.18 PTZ Control

Click  button in the Main Interface (refer to Fig4.2) to enter the PTZ Control interface which is shown as Fig4.18.

You can control PTZ cameras using the function buttons on the right side of the interface. The function of the buttons are described in the table below:

Icon	Description	Icon	Description
	Right Swinging the Speed Dome to the right.		Left Swinging the speed dome to the left.

Icon	Description	Icon	Description
	Up Swinging the speed dome up.		Down Swinging the speed dome down.
	FOCUS+ Sets the camera's long focus.		FOCUS- Sets the camera's short focus.
	ZOOM+ Sets the camera's zoom in.		ZOOM- Sets the camera's zoom out.
	IRIS+ Increases the PTZ device's light.		IRIS- Decreases the PTZ device's light.
	Go to the Preset Point		Set the Preset Point
	Adjust PTZ speed Sets the rotational speed of the PTZ.		

## CHAPTER 5 Operation with a Mouse

### 5.1 Switch the Display Mode of Channels

You can switch the display mode of channels on the DVR with a mouse.

- If the picture of the channel is in quad mode, you could switch the picture to full screen through clicking on the picture.
- If the picture is in full screen mode, you could switch the picture to quad mode through clicking on the picture.

### 5.2 Enter the Menu List

In live display mode, right-click on the picture to enter the menu list. There are three menus to choose: Search, Configuration and PTZ Control.

#### 5.2.1 Search

Click "**Search**" menu to enter the Data menu (refer to Fig3.36) to select the submenu after entering the Menu list. Please refer to '3.3.2 Search' to view the functions of the submenu.

Right-click on the picture to exit the menu.

#### 5.2.2 Configuration

Configuration submenu is used to display the Main Menu (refer to Fig3.2).

Click "**Config**" menu to enter the Main Menu and select the submenu after entering the Menu List. Please refer to '3.2 Main Menu Setting' to view the functions of the submenu.

Right-click on the picture to exit the menu.

### 5.2.3 PTZ Control

Click "**PTZ Control**" menu to enter the PTZ mode. The shortcut menu of PTZ is shown in Fig5.1.

Here you can control the zoom-in and zoom-out, focus and input brightness of the Speed Dome.

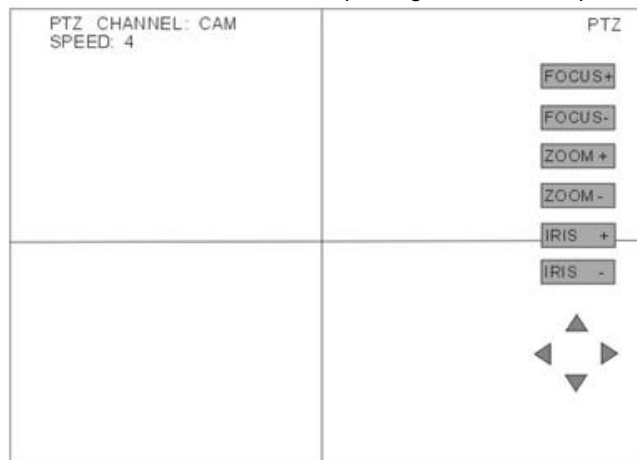


Fig5.1 Shortcut Menu of PTZ

#### FOCUS

Click "**FOCUS+**" button to control long focus of the Speed Dome. Click "**FOCUS-**" button to control short focus of the Speed Dome.

#### ZOOM

Click "**ZOOM+**" and "**ZOOM-**" buttons to control the Speed Dome zooming in and zooming out.

#### IRIS

Click "**IRIS+**" and "**IRIS-**" buttons to control brightness of the image of the Speed Dome.



**Notice:** ▲, ◀, ▶ and ▼ buttons are used to control the Speed Dome to swing up, left, right and down.





## 5.3 Fast Reverse and Fast Forward

When you play back the record, you can rewind or forward the record.

Multiples of fast forward and reverse can be controlled through using the mouse. The shortcut menus of fast reverse and fast forward are shown in Fig5.2.



**Fig5.2 Fast Reverse and Fast Forward**

- Click  button to play back the record.
- Click  button to stop play back.
- Click  button to fast reverse the record.
- Click  button to fast forward the record.

## CHAPTER 6 Frequently Asked Questions

**Question1:** You have downloaded and installed Network Client software from the DVR. But after inputting DVR IP, username and password, a message appears: 'Can't open codec TVTTH '.

**Answer:** When installing the software, the system registry and system files need to be modified. And if you login to the system as ordinary user, the modification operation could not be performed. So you need login to the system as administrator when you install the Network Client software.

**Question2:** Why is the backup speed with USB disk is so slow?

**Answer:** If you open the Network Client for playing back the record, the backup speed will be slow.

## Appendix A Main Standards & Parameters


Model			4Channel
VIDEO			
Input Level			4×BNC 1.0Vp-p±10%.75Ohm
Video Standard			NTSC / PAL
Video Output			2×BNC 1.0Vp-p±10%.75Ohm , 1×S-Video , 1×VGA(optional item)
Screen Split Control			1, 4Screen
Display	Resolution	NTSC	704x480
		PAL	704x576
	Speed	NTSC	120FPS (total)
		PAL	100FPS (total)
AUDIO			
Compression			PCM
Audio In/ Out			2CH/ 1CH
Input Level			TBD(0.5~1.4Vp-p@20Kohm)
RECORDING			
Compression			H.264
Compression bit rate			256kbps-512kbps
Resolution	NTSC	352(H)x240(V)	
	PAL	352(H)x288(V)	
Speed	NTSC	Max 120FPS (total)	
	PAL	Max 100FPS (total)	
Modes			Manual, Schedule, Motion detection, Sensor
Motion detection			16*12 detection areas can be setup
HDD interface			IDEx1 (no capacity limit)
SEARCHING			
Searching Method			Time, Event
REMOTE SURVEILLANCE			
Monitoring Environment			Client Software
Real Time			App. 4CH Full Motion Transmission

<b>ALARM</b>	
Sensor Input	4Ports
Alarm Output	1-Out(Programmable), Terminal
Motion Detection	Available For Each Camera Multi Detection Level
<b>CONNECTOR</b>	
Video Input	BNC×4
Main Monitor Output	BNC×2(Parallel), S-Video×1, VGA×1(optional)
Audio Input (Mono)	RCA×2
Audio Output (Mono)	RCA×1
Sensor Input	Terminal Block
Alarm Output	Terminal Block
PTZ (RS-485)	2Pins Terminal Block
Ethernet	RJ-45, 10/100Mbps
USB 1.1	1Port
<b>ELECTRICAL</b>	
Power Source	12VDC
Power Consumption	TDP 21Watt
<b>BACKUP</b>	
Digital Backup	Network, USB 1.1
<b>OTHERS</b>	
OS	Embedded Linux operation system
Duplexer or Triplex	Triplex
Control Device	Front Panel, USB mouse
PTZ	Panel, mouse or internet

## Appendix B Recording Capacity

The following table shows how much capability recording on 4 channels takes up per hour.

Picture Quality	PAL					
	Resolution	Total frame rate	Capability (M/hour)	Resolution	Total frame rate	Capability (M/hour)
High	352*288	100F/S	908M	352*240	120F/S	915M
Medium	352*288	100F/S	670M	352*240	120F/S	600M
Low	352*288	100F/S	437M	352*240	120F/S	440M

 **Notice:** The data in the above table comes from our tests and are just used for user's reference. Different definition and stabilization (object's movement) of the images will lead different results.

## Appendix C Abbreviations

Words	Meaning	Words	Meaning
L	Lock	HDD	Hard Disk
M	Motion Detection	A	Sensor Detection
L-L	Local Login	VLoss	Video Loss
PB	Playback and Backup	N-L	Logging in or Logging out of the Network
O-D	Disk full of System Logs	L-C	Change Configuration of the DVR from the DVR
SYS	The Event of System Setting or the System Reset	N-C	Change the Configuration of the DVR from Network
DVR	Digital Video Recorder	DEL	Deletion of Event

## Appendix D Remote Access – Port Forwarding

To access the DVR through a remote computer you need to make sure the default gateway on the DVR is the same as the IP address as your router, and the first three sets of numbers of the DVR IP address are the same as the first three sets of numbers of the routers address. Example: if you router's default gateway is 192.168.1.1 then the default gateway setting in the DVR should be 192.168.1.1, and the first three sets of numbers on the DVR's IP address should be 192.168.1. The subnet on the DVR also needs to be the same as the router, example: if the subnet on the router is 255.255.255.0 the subnet on the DVR needs to be 255.255.255.000. To get the default gateway and subnet of the router go to a computer that is attached to the same router as the DVR, click on the start button, then click on run, then enter cmd into the space and click on OK. At the cursor type ipconfig, the default gateway and subnet will be displayed. You would enter the network setting on the DVR in the SETUP-NETWORK, TYPE>STATIC section. Next you need to forward ports 80 and 2000 on the router to the IP address of the DVR. How you would do this depends on the brand and model number of your router. You can go to [www.portforward.com](http://www.portforward.com) to get instructions on how to forward ports on most popular routers. To access your router's program you would open an internet browser window and type the default gateway of the router into the address bar at the top of the window. Then follow the instructions for your router. Once you have setup the network settings on the DVR to match the settings of your router and forwarded the ports needed by the DVR, you need to modify your browser controls. You need to allow Pop-ups. To do so go to the Internet Explorer tool bar and select the "tools" option, then select the "Pop up Blocker" option and select "Turn Off Pop-up Blocker." You will also need to enable Active X controls. To do so go to the Internet Explorer tool bar and select the "tools" option, then "Internet Options", then "Security", then click the "Custom Level" button, and then select the option to enable Active X Controls and Plug Ins. To connect to the DVR from the remote computer you would then open an internet browser window and enter the internet IP of your router. To get the internet IP of your router go to [www.myipaddress.com](http://www.myipaddress.com) from a computer that is attached to the same router as the DVR. You would then access the DVR by typing the IP address you got from [www.myipaddress.com](http://www.myipaddress.com) into the browser window (Example:http://70.69.120.123). You will get a login screen where you will need to enter your user name and password (admin and 123456 by default). The first time you connect a webcam program will be downloaded to your system and you may get a message that an ActiveX control on the page may be unsafe but it is ok to click the Yes option to download the control and program. This will take you to the Internet Explorer Webcam screen.

## Appendix E Product Service

Thank you for choosing our products.

All of our products users can enjoy a conditional free warranty repair service for hardware within 12 months starting from purchase date, and a free exchange service within one month (valid for manufacturing defects).

Permanent upgrading service is provided for the software.

Liability Exclusions:

Any product malfunction, abnormalities in operation or damage caused by following reasons are not within the free service scope of our company. Please select payable service.

(1) Equipment damage caused by improper operation

(2) Improper environment and conditions in/on which the equipment operates, e.g., improper power, environment temperature, humidity and lightening strike etc. that cause equipment damage.

(3) Damage caused by acts of nature: earthquake and fire etc.

(4) Equipment damage caused by the maintenance of personnel not authorized by our company.

(5) Product sold over 12 months ago.

In order to provide various services to you, please complete registration procedure after you purchase the product. Cut off or copy User's Information Card on next page and fax or mail it to us after the card is filled in.

User's Name	Mr./Mrs.
Company Name	
Post Address	
Postal code	
Phone Number	
E-mail	
Model Number of Product	
Serial Number of Product	
Purchase Date	
Distributor	

If you have questions:

Contact Us:

**Mailing Address:**

**DPS Inc.**

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Anaheim, CA 92807

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Phone: 877-998-3440 x 538

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**Tech Support:**

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